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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,827	11/26/2003	Michael A. Kropp	57987US002	9277

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EXAMINER	
BERMAN, SUSAN W	

ART UNIT	PAPER NUMBER
1711	

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,827	KROPP ET AL.	
	Examiner	Art Unit	
	Susan W. Berman	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,10 and 12-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10 and 12-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/20/2005 has been entered.

Response to Arguments

Upon reconsideration, the indicated allowability of claims 11, 12, 16, 17, 19, 21 and 23 is withdrawn. New grounds of rejection are set forth herein below.

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 10, 12-16 and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 348 742 in view of Hoffman et al (6,224,793).

EP '742 discloses coating powders comprising epoxy compounds and encapsulated catalysts such as polyamines or as substituted imidazoles [0035] and [0046]. EP '742 teaches that a catalyst coated with or encapsulated in a polymeric material physically isolates the catalyst

from the film-forming material, thus improving processability and storage stability [0035]. See Tables 1-3. EP '742 does not mention a cationic photoinitiator; however, phosphonium salt compounds and onium-tetrasubstituted organoborate salts are taught as being suitable catalysts to be added to accelerate curing [0020]. Such onium salt compounds are known in the art as being photoinitiators as well as thermal catalysts, i.e. they can be activated by light or heat.

Hoffman et al teach encapsulated active materials comprising an active agent encapsulated in a crystallizable polymer wherein the particle size is 3000 microns or less. The encapsulated active agents are said to be stable at ambient temperatures and exhibit rapid reactivity upon release at a desired temperature. Hoffman et al further teach that the presence of the encapsulating agent does not result in deterioration of the adhesive or elastomer properties of a cured composition" (Abstract). Hoffman et al teach an embodiment wherein the active agent is a curing accelerator, such as an urea or imidazole, for an epoxy resin composition (column 5, lines 29-62). Hoffman et al also teach encapsulated organometallic catalysts (column 4, lines 11-20). Patentees teach that the crystallizable polymer is most preferably a side chain crystallizable polymer (column 6, lines 58-61).

It would have been obvious to one skilled in the art at the time of the invention to select an encapsulated active agent in a side chain crystallizable polymer from those taught by Hoffman et al as curing accelerator fro an epoxy resin composition and to substitute it for the analogous encapsulated catalysts in the analogous epoxy compositions taught by EP '742. EP '742 provides motivation by teaching the use of encapsulated or polymer-bound amines and imidazoles for curing epoxy compositions. Hoffman et al teach the preferability and advantages of using an active agent such as an urea or imidazole encapsulated in a side chain crystallizable

polymer for curing epoxy resin compositions. One of ordinary skill in the art at the time of invention would have been motivated by a reasonable expectation of taking advantage of the properties of the encapsulated active agents taught by Hoffman et al and discussed above. With respect to claim 24, it would have been obvious to one skilled in the art at the time of the invention to cure the composition suggested by combination of the teachings of Hoffman et al with EP '742 by irradiation to activate the catalyst, such as the phosphonium compound taught by EP '742, and also by activation, such as by heating, of the encapsulated active agent catalyst taught by Hoffman et al.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 348 742 in view of Hoffman et al (6,224,793), as applied to claims 1-7, 10, 12-16 and 18-24 above, and further in view of Lamanna et al (5,554,664). EP '742 discloses phosphonium compounds as useful catalysts fro the disclosed compositions. Lamanna et al disclose energy activatable catalysts comprising a fluorinated alkylsulfonyl methide or imide anion and organometallic or I, P or S-containing onium cations. Lamanna et al teach that the disclosed catalysts have improved solubility in organic solvents, are highly reactive initiators and exhibit minimal corrosiveness in coatings and adhesives (Abstract).

It would have been obvious to one skilled in the art at the time of the invention to employ the fluorinated alkylsulfonyl methide or imide phosphonium catalysts taught by Lamanna et al as the phosphonium catalyst in the compositions taught by EP '742 and Hoffman et al in combination, as set forth above. One of ordinary skill in the art at the time of the invention would

have been motivated by a reasonable expectation of taking advantage of the properties taught by Lamanna et al in the compositions taught by combination of EP '74 and Hoffmann et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Berman

SB
6/17/06

Susan W Berman
Primary Examiner
Art Unit 1711